

#### **NEW MEXICO**

#### **ENVIRONMENT DEPARTMENT**

Ground Water Quality Bureau





Draft: February 15, 2021

# GROUND WATER QUALITY BUREAU DISCHARGE PERMIT Issued under 20.6.2 NMAC

Facility Name:	San Juan Generating Station Solid Waste Dispos	al Pit
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**Discharge Permit Number:** DP-306

**Facility Location:** 6800 North County Road, Waterflow, NM

Sections 17 and 20, Township 30N, Range 15W

County: San Juan

Permittee: Public Service Company of New Mexico

Mailing Address: Sky Northup

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Waterflow, NM 87421

Facility Contact: John Hale

Telephone Number/Email: 505-241-2014/john.hale@pnmresources.com

Permitting Action: Renewal

Permit Issuance Date: DATE
Permit Expiration Date: DATE

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MICHELLE HUNTER Date

Chief, Ground Water Quality Bureau New Mexico Environment Department

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#### **ATTACHMENTS**

Discharge Permit Summary

Table of 20.6.2.3103 Standards for Groundwater

Groundwater Discharge Permit Guidance for Synthetically Lined Lagoons – Liner Material and Site Preparation, Revision 0.0, May 2007

New Mexico Environment Department Ground Water Quality Bureau Monitoring Well Construction and Abandonment Guidelines, Revision 1.1, March 2011

DRAFT: February 15, 2021

#### I. INTRODUCTION

The New Mexico Environment Department (NMED) issues this groundwater discharge permit renewal (Discharge Permit or DP-306) to the Public Service Company of New Mexico (PNM or Permittee) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978 §§74-6-1 through 74-6-17, and the New Mexico Water Quality Control Commission (WQCC) Ground and Surface Water Protection Regulations, 20.6.2 NMAC.

NMED's purpose in issuing this Discharge Permit, and in imposing the requirements and conditions specified herein, is to control the discharge of water contaminants from the San Juan Generating Station Solid Waste Disposal Pit (Facility) in order to protect groundwater and those segments of surface water gaining from groundwater inflow for present and potential future use as domestic and agricultural water supply and other uses, and to protect public health. It is NMED's determination in issuing this Discharge Permit, that the Permittee has met the requirements of Subsection C of 20.6.2.3109 NMAC. The Permittee is responsible for complying with the terms and conditions of this Discharge Permit pursuant to Section 20.6.2.3104 NMAC; failure to do so may result in enforcement action by NMED (20.6.2.1220 NMAC).

Described below are the activities that produce the discharge, the location of the discharge, and the quantity, quality and flow characteristics.

The Permittee disposes of up to 2,290 cubic yards per year of non-hazardous solid wastes to the synthetically lined Solid Waste Disposal Pit with a total capacity of 50,000 cubic yards. The authorized solid waste types disposed of include but are not limited to SO<sub>2</sub> sump and line cleanings, spilled lime and calcium sulfate/sulfite, pond sludge, demineralizer resins, sand blasting grit. The Permittee does not place wastewaters into the Pit.

NMED authorizes discharges potentially affecting groundwater at the San Juan Generating Station (SJGS) under three separate groundwater discharge permits. Activities covered by this Discharge Permit are limited to plant generated residual solid wastes disposed of in the Solid Waste Disposal Pit. Discharges of multiple types of wastewater, including process water, storm water, recovery trench return water and miscellaneous process upset-related surface flows, are placed into ponds and basins at the Facility regulated under DP-1327. Discharge of contaminated groundwater from the Shumway Arroyo Groundwater Recovery System is placed into a synthetically lined evaporation impoundment regulated under DP-1843.

The discharged solid wastes addressed in this Discharge Permit, DP-306, may contain water contaminants or toxic pollutants elevated above the standards of Section 20.6.2.3103 NMAC and is not subject to the exemption at Subsection 20.6.2.3105.A NMAC.

The Facility is located approximately 15 miles west of Farmington, in Section 20, Township 30N, Range 15W, San Juan County. A discharge at the Facility is most likely to affect groundwater at a

depth of approximately 10 to 40 feet and having a total dissolved solids (TDS) concentration of approximately 25,000 milligrams per liter.

NMED issued the original DP-306 to the Permittee on December 20, 1983 and subsequently renewed and/or modified the Permit on January 11, 1990, July 31, 1995, July 19, 2002, and June 5, 2013. The application (i.e., discharge plan) associated with this Discharge Permit consists of the materials submitted by the Permittee dated January 17, 2018 and materials contained in the administrative record prior to issuance of this Discharge Permit. The Permittee shall manage the discharge in accordance with all conditions and requirements of this Discharge Permit.

This Discharge Permit has an associated Closure Plan, the intent of which it is to prevent the exceedance of the groundwater protection standards of 20.6.2.3103 NMAC after the Facility ceases to operate. The Closure Plan was approved by NMED on May 11, 2020. The Closure Plan includes a detailed description of all closure and post-closure maintenance and inspection procedures. The Permittee's obligation to implement the Closure Plan and associated permit requirements survives the termination or expiration of this Discharge Permit. Portions of the Closure Plan may be implemented and competed prior to the cessation of the operation of the Facility.

This Discharge Permit requires financial assurance, a mechanism required of the Permittee to demonstrate that they will have the financial resources to properly close the Solid Waste Disposal Pit when its operational life is over. Associated with financial assurance is the Discharge Permit requirement to produce and keep updated a closure cost estimate intended to sufficiently identify the cost of implementing all aspects of closure as described in the Closure Plan.

NMED approved the Permittee's closure cost estimate on October 30, 2019. NMED approved the Permittee's financial assurance mechanism on May 11, 2020. This Discharge Permit requires the maintenance of sufficient financial assurance during the term of this Discharge Permit and until all closure activities have been successfully accomplished.

NMED reserves the right to require a Discharge Permit Modification in the event NMED determines that the Permittee is or may be violating, or is likely to violate in the future, the requirements of 20.6.2 NMAC or the standards of Section 20.6.2.3103 NMAC. NMED reserves this right pursuant to Section 20.6.2.3109 NMAC. An NMED requirement to modify the Discharge Permit may result from a determination by the department that structural controls and/or management practices approved under this Discharge Permit are insufficiently protective of groundwater quality and human health. NMED reserves the right to require the Permittee implement abatement of water pollution and remediate groundwater quality.

NMED's issuance of this Discharge Permit does not relieve the Permittee of the responsibility to comply with the WQA, WQCC Regulations, and any other applicable federal, state and/or local laws and regulations, such as zoning requirements and nuisance ordinances.

This Discharge Permit may use the following acronyms and abbreviations.

Abbreviation	Explanation	Abbreviation	Explanation
BOD <sub>5</sub>	biochemical oxygen demand	NMSA	New Mexico Statutes
	(5-day)		Annotated
CFR	Code of Federal Regulations	NO <sub>3</sub> -N	nitrate-nitrogen
CFU	colony forming unit	NTU	nephelometric turbidity units
Cl	chloride	QA/QC	Quality Assurance/Quality
			Control
EPA	United States Environmental	TDS	total dissolved solids
	Protection Agency		
gpd	gallons per day	TKN	total Kjeldahl nitrogen
LAA	land application area	total nitrogen	= TKN + NO <sub>3</sub> -N
LADS	Land Application Data Sheet(s)	TRC	total residual chlorine
mg/L	milligrams per liter	TSS	total suspended solids
mL	milliliters	WQA	New Mexico Water Quality
			Act
MPN	most probable number	WQCC	Water Quality Control
			Commission
NMAC	New Mexico Administrative	WWTF	Wastewater Treatment
	Code		Facility
NMED	New Mexico Environment		
	Department		

#### II. FINDINGS

In issuing this Discharge Permit, NMED finds the following.

- 1. The Permittee is discharging effluent or leachate from the Facility so that such effluent or leachate may move into groundwater of the State of New Mexico that has an existing concentration of 10,000 mg/L or less of TDS, within the meaning of Subsection A of 20.6.2.3101 NMAC, without exceeding standards of 20.6.2.3103 NMAC for any water contaminant.
- 2. The Discharge Permit allows the Permittee to discharge effluent or leachate from the Facility directly or indirectly into groundwater pursuant to this Discharge Permit and Sections 20.6.2.3000 through 20.6.2.3114 NMAC.
- 3. The discharge from the Facility is not subject to any of the exemptions of Section 20.6.2.3105 NMAC.

#### III. AUTHORIZATION TO DISCHARGE

The Permittee is responsible for ensuring that discharges authorized by this Discharge Permit are consistent with the terms and conditions herein pursuant to 20.6.2.3104 NMAC.

This Discharge Permit authorizes the Permittee to discharge up to 2,290 cubic yards per year of non-hazardous solid wastes to the 50,000 cubic yard synthetically lined Solid Waste Disposal Pit. The authorized solid waste types include, but are not limited to, SO<sub>2</sub> sump and line cleanings, spilled lime and calcium sulfate/sulfite, pond sludge cleanings, demineralizer resins, and sand blasting grit.

[20.6.2.3104 NMAC, Subsection C of 20.6.2.3106 NMAC, Subsection D of 20.6.2.3109 NMAC]

#### IV. CONDITIONS

NMED issues this Discharge Permit for the discharge of solid wastes with potential groundwater contaminants subject to the following conditions.

#### A. OPERATIONAL PLAN

#	Terms and Conditions
1.	The Permittee shall implement the following operational plan to ensure compliance with Title 20, Chapter 6, Parts 2 and 4 NMAC.  [Subsection C of 20.6.2.3109 NMAC]
2.	The Permittee shall operate in a manner that does not violate standards and requirements of Sections 20.6.2.3101 and 20.6.2.3103 NMAC.  [20.6.2.3101 NMAC, 20.6.2.3103 NMAC, Subsection C of 20.6.2.3109 NMAC]

#### **Operating Conditions**

#	Terms and Conditions
3.	The Permittee shall maintain fences around the Solid Waste Disposal Pit to restrict access to the Pit by the general public and animals. The fences shall consist of a minimum of six-foot chain link or field fencing and locking gates. The Permittee shall maintain the fences to serve the stated purpose throughout the term of this Discharge Permit.
	[Subsections B and C of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.D]

#### # Terms and Conditions

- 4. The Permittee shall maintain the Solid Waste Disposal Pit liner in such a manner as to avoid conditions that could affect the liner or the structural integrity of the Pit. Characterization of such conditions may include the following:
  - erosion damage;
  - animal burrows or other damage;
  - the presence of vegetation including aquatic plants, weeds, woody shrubs or trees growing within five feet of the top inside edge of a sub-grade impoundment, within five feet of the toe of the outside berm of an above-grade impoundment, or within the impoundment itself;
  - the presence of large debris or large quantities of debris in the impoundment;
  - evidence of seepage; or
  - evidence of berm subsidence.

The Permittee shall routinely control vegetation growing around the Pit by mechanical removal in a manner that is protective of the liner.

The Permittee shall visually inspect the pit and surrounding berms on a monthly basis to ensure proper maintenance. In the event that an inspection reveals any evidence of damage that threatens the structural integrity of the berm or liner, or that may result in an unauthorized discharge, the Permittee shall implement the Contingency Plan set forth in this Discharge Permit.

The Permittee shall create and maintain a log of all pit inspections which describes the date of the inspection, any findings and repairs and the name of the person responsible for the inspection. The Permittee shall make the log available to NMED upon request.

[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]

5. The Permittee shall preserve a minimum of two feet of freeboard, i.e., between the solids in the pit and the elevation of the lowest-most top of the pit liner.

In the event that the Permittee determines that it cannot preserve two feet of freeboard in the pit, the Permittee shall implement the Contingency Plan set forth in this Discharge Permit.

[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]

#### B. MONITORING AND REPORTING

#	Terms and Conditions
6.	The Permittee shall conduct the monitoring, reporting, and other requirements listed below in accordance with the monitoring requirements of this Discharge Permit.
	[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
7.	METHODOLOGY — Unless otherwise specified by this Discharge Permit, or approved in writing by NMED, the Permittee shall use sampling and analytical techniques that conform with the references listed in Subsection B of 20.6.2.3107 NMAC.  [Subsection B of 20.6.2.3107 NMAC]
8.	Quarterly monitoring - The Permittee shall perform monitoring and other Permit required actions during the following periods and shall submit quarterly reports to NMED by the following due dates:  • January 1st through March 31st – due by May 1st;  • April 1st through June 30th – due by August 1st;  • July 1st through September 30th – due by November 1st; and  • October 1st through December 31st – due by February 1st.  [Subsection A of 20.6.2.3107 NMAC]

#### Monitoring Actions with Implementation Deadlines

- 9. Within 60 days following the issuance date of this Discharge Permit (**by DATE**), the Permittee shall submit a written groundwater monitoring well location proposal for NMED review and approval. The proposal shall designate the installation locations of the monitoring wells required by Condition 10 of this Discharge Permit. The proposal shall include, at a minimum, the following information.
  - a) A map showing the proposed location of the monitoring wells in relation to the boundary of the source it is intended to monitor.
  - b) A written description of the specific location proposed for the monitoring wells including the distance (in feet) and direction of the monitoring wells from the edge of the source it is intended to monitor. Examples include: 35 feet north-northwest of the northern berm of the synthetically lined impoundment; 45 feet due south of the leachfield; and 30 feet southeast of the re-use area 150 degrees from north.
  - c) A statement describing the groundwater flow direction beneath the Facility, and documentation and/or data supporting the determination.

The Permittee must have NMED's approval of all monitoring well locations prior to their installation.

[Subsection A of 20.6.2.3107 NMAC]

- 10. Within 120 days of the issuance date of this Discharge Permit (**by DATE**), the Permittee shall install the following new monitoring wells.
  - a) One monitoring well (MW-SWDP1) located 20 to 50 feet hydrologically downgradient of the Solid Waste Disposal Pit.
  - b) One monitoring well (MW-SWDP2) located at an alternate location from MW-SWDP1 and 20 to 50 feet hydrologically downgradient of the Solid Waste Disposal Pit.

The Permittee shall complete the wells in accordance with the attachment titled (Monitoring Well Guidance) or alternative methods submitted for approval.

Unless otherwise noted in this Discharge Permit, the requirement to install a monitoring well downgradient of a source is <u>not</u> contingent upon construction of the Facility, or discharge of waste from the Facility.

[Subsection A of 20.6.2.3107 NMAC]

11. Following the installation of the monitoring wells required by this Discharge Permit, the Permittee shall sample groundwater in the wells and analyze the samples for TKN, NO<sub>3</sub>-N, TDS and Cl.

Groundwater sample collection, preservation, transport and analysis shall be performed according to the following procedure.

- a) Measure the depth-to-most-shallow groundwater from the top of the well casing to the nearest one-hundredth of a foot.
- b) Purge three well volumes of water from the well prior to sample collection.
- c) Obtain samples from the well for analysis.
- d) Properly prepare, preserve and transport samples.
- e) Analyze samples in accordance with the methods authorized in this Discharge Permit.

Within 45 days of the installation of the monitoring wells the Permittee shall submit a well completion report to NMED. A well completion report shall at a minimum include; the Office of the State Engineer permit, well construction and lithologic logs, depth-to-most-shallow groundwater measurements, analytical results including the laboratory QA/QC summary report, and a facility layout map showing the location and number of each well. The Permittee shall insure the well completion report addresses each numbered item in the General Drilling and Well Specifications in the Monitoring Well Guidelines.

#### [Subsection A of 20.6.2.3107 NMAC]

12. Within 150 days following the issuance date of this Discharge Permit (by DATE), the Permittee shall perform a professional survey of the new groundwater monitoring wells approved by NMED for Discharge Permit monitoring purposes. The survey shall be tied or referenced to a U.S. Geological Survey (USGS) or other permanent benchmark. Survey data shall include northing, easting and elevation to the nearest one-hundredth of a foot or shall be in accordance with the "Minimum Standards for Surveying in New Mexico" (12.8.2 NMAC). The survey shall bear the seal and signature of a licensed New Mexico professional surveyor (pursuant to the New Mexico Engineering and Surveying Practice Act and the rules promulgated under that authority).

The Permittee shall utilize the survey to establish an elevation at the top-of-casing, with a permanent marking indicating the point of elevation.

Depth-to-most-shallow groundwater shall be measured to the nearest one-hundredth of a foot in all surveyed wells [and referenced to mean sealevel], and the data shall be used to develop a groundwater elevation contour, i.e., potentiometric surface, map showing the location of all monitoring wells and the direction and gradient of groundwater flow in the uppermost aquifer below the Facility. The Permittee shall submit the data and groundwater elevation contour map to NMED within 30 days of survey completion.

[Subsection A of 20.6.2.3107 NMAC, NMSA 1978, §§ 61-23-1 through 61-23-32]

#### **Groundwater Monitoring Conditions**

- 13. The Permittee shall perform quarterly groundwater sampling in the following groundwater monitoring wells and analyze the samples for:
  - arsenic (As)
  - boron (B)
  - cadmium (Cd)
  - calcium (Ca)
  - chloride (CI)
  - chromium (Cr)
  - cobalt (Co)
  - copper (Cu)
  - fluoride (F)
  - iron (Fe)
  - lead (Pb)
  - magnesium (Mg)

- molybdenum (Mo)
- nickel(Ni)
- potassium (K)
- selenium (Se)
- sodium (Na)
- uranium (U)
- carbonated (CO<sub>3</sub>)
- bicarbonate (HCO<sub>3</sub>)
- nitrate (NO<sub>3</sub>)
- sulfate (SO<sub>4</sub>)
- total dissolved solids (TDS)
- pH

- manganese (Mn)
- a) MW-SWDP1, located hydrologically downgradient of the Solid Waste Disposal Pit.
- b) MW-SWDP2, located at an alternate location from MW-SWDP1 and hydrologically downgradient of the Solid Waste Disposal Pit.

The Permittee shall perform groundwater sample collection, preservation, transport and analysis according to the following procedures.

- a) Measure the depth-to-most-shallow groundwater from the top of the well casing to the nearest one-hundredth of a foot.
- b) Purge three well volumes of water from the well prior to sample collection.
- c) Obtain samples from the well for analysis.
- d) Properly prepare, preserve and transport samples.
- e) Analyze samples in accordance with the methods authorized in this Discharge Permit.

The Permittee shall submit the depth-to-most-shallow groundwater measurements and the laboratory analytical data results including the laboratory QA/QC summary report for each well, and a Facility layout map showing the location and number of each well to NMED in the quarterly monitoring reports.

[Subsection A of 20.6.2.3107 NMAC]

14. NMED shall have the option to perform downhole inspections of all groundwater monitoring wells identified in this Discharge Permit. NMED shall establish the inspection date and provide at least a 60-day notice to the Permittee by certified mail. The Permittee shall remove any existing dedicated pumps at least 48 hours prior to NMED inspection to allow adequate settling time of sediment agitated from pump removal.

Should the Permittee decide to install a pump monitoring well without a dedicated pump, the Permittee shall notify NMED at least 90 days prior to pump installation so that NMED can schedule a downhole well inspection(s) prior to pump placement.

[Subsections A and D of 20.6.2.3107 NMAC]

#### **Facility Monitoring Conditions**

15. The Permittee shall create and maintain a log for all materials disposed of in the Solid Waste Disposal Pit. The disposal logs shall include the following information: date of disposal, name of person disposing the material, measurements of the material, and a description of the material including its common name.

The Permittee shall submit a summary of the disposal logs for the previous calendar year to NMED in an annual monitoring report due by February 1 of each year.

#### [Subsection A of 20.6.2.3107 NMAC]

16. The Permittee shall not accept free liquids in the Solid Waste Disposal Pit. The Permittee shall analyze all solid wastes suspected of containing free liquids, using EPA Method 9095, Paint Filter Liquids Test. The Permittee shall reject any solid wastes that do not pass the test and dispose of the solids in accordance with all local, state, and federal regulations.

The Permittee shall document each instance in which a solid waste does not pass the filter test and shall retain such documentation for NMED review.

[NMSA 1978, § 74-6-5.D, Subsections B and C of 20.6.2.3109 NMAC]

17. Once prior to the date that the term of this Discharge Permit ends, the permittee shall collect a representative grab sample of solid waste from an appropriately representative location within the Solid Waste Disposal Pit and have the sample analyzed for volatile organic compounds (using EPA method 8260) and semi-volatile organic compounds (using EPA method 8270). The permittee shall compare, in a table, the analytical results to the most recent version of the NMED Risk Assessment Guidance for Site Investigations and Remediation Soil Screening Levels - Table A-1.

The Permittee shall submit analytical results and the table with identified constituents to NMED in the subsequent quarterly monitoring report.

#### [Subsection A of 20.6.2.3107 NMAC]

18. Within 180 days following the issuance date of this Discharge Permit (**by DATE**), the Permittee shall have characterized via chemical analysis all blasting grit disposed of in the Solid Waste Disposal Pit as to whether the blasting grit is a hazardous waste.

Prior to the placement of a solid waste previously not disposed of in the Solid Waste Disposal Pit, the Permittee shall make a hazardous waste determination via chemical analysis of the waste.

The Permittee shall collect a representative sample of blasting grit and shall determine if the waste demonstrates a hazardous waste characteristic. The Permittee shall use the sample preparation procedure referred to as the Toxic Characteristic Leaching Procedure (TCLP), Environmental Protection Agency (EPA) Method 1311, when performing this waste characterization.

Any material determined to be a hazardous waste shall be disposed of at a permitted hazardous waste Facility in accordance with all local, state, and federal regulations.

The Permittee shall document each hazardous waste determination and shall retain such documentation for NMED review.

[20.6.2.3107 NMAC]

#### C. CONTINGENCY PLAN

#### Terms and Conditions

19. In the event that groundwater monitoring associated with the Solid Waste Disposal Pit indicates that groundwater exceeds a standard identified in Section 20.6.2.3103 NMAC, the Permittee shall collect a confirmatory sample from the monitoring well within 15 days of receipt of the initial sampling results to confirm the initial sampling results.

Within 60 days of confirmation of groundwater contamination, the Permittee shall submit to NMED a Corrective Action Plan (CAP) that proposes, at a minimum, contaminant source control measures and an implementation schedule. The Permittee shall implement the CAP as approved by NMED.

Once this groundwater exceedance response condition is invoked whether during the term of this Discharge Permit or after the term of this Discharge Permit and prior to the completion of the Discharge Permit closure plan requirements, this condition shall apply until the Permittee has fulfilled the requirements of this condition and groundwater monitoring confirms for a minimum of eight (8) consecutive quarterly samples that groundwater does not exceed the standards of Section 20.6.2.3103 NMAC.

Violation of the groundwater standard beyond 180 days after the confirmation of groundwater contamination may cause NMED to require the Permittee to abate water pollution consistent with the requirements and provisions of Section 20.6.2.4101, Section 20.6.2.4103, Subsections C and E of 20.6.2.4106, Section 20.6.2.4107, Section 20.6.2.4108 and Section 20.6.2.4112 NMAC.

[Subsection A of 20.6.2.3107 NMAC, Subsection E of 20.6.2.3109 NMAC]

20. In the event that information available to NMED indicates that a well is not constructed in a manner consistent with the attachment titled (Monitoring Well Guidance); contains insufficient water to effectively monitor groundwater quality; or is otherwise not completed in a manner that is protective of groundwater quality, the Permittee shall install a replacement well(s) within 120 days following notification from NMED.

#	Terms and Conditions
	The Permittee shall install replacement wells at locations approved by NMED prior to installation and shall complete replacement wells in accordance with the attachment Monitoring Well Guidance. The Permittee shall submit well construction and lithologic logs to NMED within 60 days following well completion.
	The Permittee shall properly plug and abandon a monitoring well requiring replacement upon completion of the replacement monitoring well. The Permittee shall complete the well plugging and abandonment, and shall document the abandonment procedures, in accordance with the attachment Monitoring Well Guidance and all applicable local, state, and federal regulations. The Permittee shall submit a copy of the well abandonment documentation to NMED within 60 days following the replacement well completion.  [Subsection A of 20.6.2.3107 NMAC]
21.	In the event that an inspection reveals significant damage has occurred or is likely to affect the structural integrity of the pit liner or its ability to contain contaminants, the Permittee shall propose the repair or replacement by submitting a Corrective Action Plan (CAP) to NMED for approval. The Permittee shall ensure the CAP is submitted to NMED within 30 days after discovery of the damage or following notification from NMED that significant damage is evident. The Permittee shall ensure the CAP includes a schedule for completion of corrective actions. The Permittee shall initiate implementation of the CAP following approval by NMED.
	[Subsection A of 20.6.2.3107 NMAC, Subsection C of 20.6.2.3109 NMAC]
22.	In the event that the pit cannot preserve a minimum of two feet of freeboard, the Permittee shall take actions to restore the required freeboard as authorized by this Discharge Permit and all applicable local, state, and federal regulations.
	In the event that two feet of freeboard cannot be restored within a period of 72 hours following discovery, the Permittee shall propose actions to restore two feet of freeboard by submitting a short-term Corrective Action Plan (CAP) to NMED for approval. Examples of short-term corrective actions include the hauling of excess waste from the pit or reducing the amount of waste discharged to the pit. The Permittee shall ensure the CAP includes a schedule for completion of corrective actions. The Permittee shall submit the CAP within 15 days following the date the Permittee or the NMED discover the exceedance. The Permittee shall implement the CAP following NMED approval.

#### # Terms and Conditions

In the event that the short-term corrective actions fail to restore two feet of freeboard, the Permittee shall submit to NMED a proposal for permanent corrective actions in a long-term CAP. The Permittee shall submit the long-term CAP within 90 days following failure of the short-term CAP. Examples corrective actions include the installation of an additional storage pit or a significant and permanent reduction in the amount of waste discharged to the pit. The Permittee shall ensure the long-term CAP includes a schedule for completion of corrective actions. The Permittee shall implement the CAP following NMED approval.

#### [Subsection A of 20.6.2.3107 NMAC]

23. In the event that a release occurs that is not authorized under this Discharge Permit (commonly known as a "spill"), the Permittee shall take measures to mitigate damage from the unauthorized discharge and initiate the notifications and corrective actions required in Section 20.6.2.1203 NMAC and summarized below.

Within <u>24 hours</u> following discovery of the unauthorized discharge, the Permittee shall verbally notify NMED and provide the following information.

- a) The name, address, and telephone number of the person or persons in charge of the Facility, as well as of the owner and/or operator of the Facility.
- b) The name and address of the Facility.
- c) The date, time, location, and duration of the unauthorized discharge.
- d) The source and cause of unauthorized discharge.
- e) A description of the unauthorized discharge, including its estimated chemical composition.
- f) The estimated measurements of the unauthorized discharge.
- g) Any actions taken to mitigate immediate damage from the unauthorized discharge.

Within <u>one week</u> following discovery of the unauthorized discharge, the Permittee shall submit written notification to NMED providing the information listed above and any pertinent updates.

Within <u>15 days</u> following discovery of the unauthorized discharge, the Permittee shall submit a Corrective Action Plan (CAP) to NMED describing any corrective actions previously taken and corrective actions to be taken relative to the unauthorized discharge. The CAP shall include the following information.

- a) A description of proposed actions to mitigate damage from the unauthorized discharge.
- b) A description of proposed actions to prevent future unauthorized discharges of this nature.
- c) A schedule for completion of proposed actions.

#	Terms and Conditions
	In the event that the unauthorized discharge causes or may with reasonable probability cause water pollution in excess of the standards and requirements of Section 20.6.2.4103 NMAC, and the water pollution will not be abated within 180 days after notice is required to be given pursuant to Paragraph (1) of Subsection A of 20.6.2.1203 NMAC, the Permittee may be required to abate water pollution pursuant to Sections 20.6.2.4000 through 20.6.2.4115 NMAC, including the requirement to submit a financial assurance plan which covers the estimated costs to conduct the actions required by an associated abatement plan pursuant to Subsection C of 20.6.2.4104 NMAC.  The Permittee shall not construe anything in this condition as relieving them of the obligation to comply with all requirements of Section 20.6.2.1203 NMAC.
24.	In the event that NMED or the Permittee identifies any failures of the discharge plan, i.e., the application, or this Discharge Permit not specifically noted herein, NMED may require the Permittee to submit a Corrective Action Plan and a schedule for completion of corrective actions to address the failure(s). Additionally, NMED may require a discharge permit modification to achieve compliance with 20.6.2 NMAC.  [Subsection A of 20.6.2.3107 NMAC, Subsection E of 20.6.2.3109 NMAC]

### D. CLOSURE PLAN

### **Permanent Facility Closure Conditions**

#	Terms and Conditions
25.	The Permittee shall implement the approved Closure Plan (CP).
	The Permittee shall provide an updated CP with the renewal application for this Discharge Permit. The Permittee shall ensure that the updated CP describes the closure activities which have been completed and the remaining procedures necessary to close the Solid Waste Disposal Pit. The Permittee shall ensure that the CP addresses post-closure care, including the continued maintenance of the Pit cover system, including the soil cover, the associated stormwater conveyance system, and associated vegetation. The Permittee shall ensure that the updated CP includes an operational schedule detailing the sequence and the allotted time necessary for completion of all procedures described in the CP. The Permittee shall ensure the updated CP is sufficiently detailed to produce an accurate estimate of the costs associated with all closure procedures.

#	Terms and Conditions
	[Subsection A of 20.6.2.3107 NMAC]
26.	Cover System Evaluation: The Permittee's CP shall ensure evaluation of the Pit cover system by including a commitment to perform quarterly erosion inspections, performance of an erosion inspection after a 24-hour rain event totally greater than one inch, and performance of an annual vegetation inspection. Annual vegetation inspections shall address vegetation density and diversity measurements.  The Permittee's Pit cover system evaluations shall demonstrate a minimum of 12 years of Pit cap stabilization, including vegetation establishment without additional seed application and minimal erosion of the cover system during the period.  [Subsection A of 20.6.2.3017]
27.	Closure Reporting: Upon commencement of closure activities, the Permittee shall submit an annual closure progress report (Closure Report) to NMED identifying all activities that have been or will be conducted in accordance with the approved CP. The Closure Report shall include results from the Pit cover system inspections performed during the period. The Permittee shall submit the Closure Report in the report to NMED due August 1st of each year.  [Subsection A of 20.6.2.3017]
28.	Closure Cost Estimate: The Permittee shall provide an updated closure cost estimate with the application for Discharge Permit renewal for the purpose of ensuring financial assurance for the closure of the Solid Waste Disposal Pit. The Permittee shall ensure that the updated closure cost estimate is sufficient to cover the cost of implementing all aspects of Pit closure as described in the updated CP required at Condition 25.  The Permittee shall ensure that an updated closure cost estimate addresses increased costs due to inflation. The updated closure cost estimate shall address any revisions to the approved CP due to completed closure activities, the availability of new technologies, or other information causing a change to associated closure costs.  The updated closure cost estimate shall be based on the cost of hiring a third party to conduct closure activities. The closure cost estimate shall include third-party direct costs, contingency costs in the amount of 15 percent of the direct costs, the cost of an independent project manager and contract administration, and NMED oversight and administration costs, including indirect costs. The updated closure cost estimate shall be sufficient to perform all closure activities at any time following five years from the time the cost estimate is revised.

**Terms and Conditions** Proposed updated closure cost estimates are subject to NMED's approval. The Permittee shall keep the approved CP and closure cost estimates in the Facility operating record and at the Facility while offices are maintained at the Facility after the commencement of closure. [Subsection A of 20.6.2.3017] 29. Financial Assurance: The Permittee shall maintain, and if necessary, update financial assurance with NMED to cover costs associated with closure of the Solid Waste Disposal Pit as described in the updated CP required at Condition 25 and the updated closure cost estimate required at Condition 28. The Permittee shall ensure that financial assurance funds will be available to implement closure if at any time the Permittee is unable, unwilling, or otherwise fails to implement any portion of the CP. The financial assurance instrument(s), including any revised or updated financial assurance instrument(s), shall meet the requirements below. 1. The Permittee shall retain financial assurance in the amount necessary to cover the approved closure cost estimate until released by NMED. The Permittee shall not propose any form of self-guarantee. The financial assurance instrument(s) shall ensure that funds will be available to implement complete closure if at any time the Permittee is unable, unwilling, or otherwise fails to implement any portion of the closure plan as required by this Discharge Permit. If the financial assurance instrument(s) entails incremental costs of maintaining the instrument(s), i.e., costs for a trustee, the amount of the financial assurance shall be increased to include all such costs. 2. NMED shall be named as the sole beneficiary in each financial assurance instrument(s). 3. The Permittee shall establish a trust to receive and disburse funds, which may arise as the result of forfeiture of financial assurance. The trust shall name NMED as the beneficiary. The trust agreement shall be in a form satisfactory to the State Board of Finance and shall be subject to approval by the Governor pursuant to NMSA 1978, § 46-4-1 through 9. The trust shall be maintained until complete

closure has occurred and NMED terminates any existing discharge permit in effect at the time. Upon forfeiture of financial assurance, the forfeited amount shall be deposited directly into the trust and shall be used for any activities or

4. The financial assurance instrument(s) shall include a method for adjustments due to changes in inflation, new technologies, and NMED approved revisions to the closure plan based on continued investigations or other information and shall be adjusted no less frequently than every five years such that, at all times, the

costs related to complete closure of the Pit.

# **Terms and Conditions** amount of financial assurance provided by the Permittee shall be sufficient to perform complete closure at any time during the following five years from the update. 5. The Permittee may request a review by NMED of remaining closure measures and associated financial assurance once every twelve months. The request for closure review and a reduction in the financial assurance amount shall describe the closure measures completed and must contain a cost estimate for remaining closure measures. NMED may require updated financial assurance as a result of changes to site conditions that warrant changes to the CP. Should circumstances warrant adjustments to the approved financial assurance, NMED will require them in writing and the Permittee shall make the adjustment within 180 days. [Subsection A of 20.6.2.3107] The Permittee shall adhere to the following stipulations for cancellation, non-renewal, 30. forfeiture, or release of the financial assurance instrument(s). a) Cancellation or Non-renewal: Each financial assurance instrument shall require the financial assurance provider to give at least 120 days written notice to NMED and the Permittee prior to cancellation or non-renewal of the financial assurance instrument. If NMED receives notice of cancellation or non-renewal from a financial assurance provider, the Permittee shall propose an alternate financial assurance mechanism to NMED within 30 days of the notice. If NMED approves the alternate financial assurance mechanism, the Permittee shall execute it and submit it to NMED for final acceptance within 30 days of NMED approval. If the Permittee fails to obtain alternate financial assurance acceptable to NMED within 30 days of NMED approval, the current financial assurance shall be subject to forfeiture. b) Forfeiture: If NMED determines that implementation of all or any part of complete closure is required and that the Permittee is unable or unwilling or will otherwise fail to conduct all or any part of complete closure as required by this Discharge Permit, then NMED may proceed with forfeiture of all or part of the financial assurance. Prior to beginning a forfeiture proceeding, NMED will provide written notice by certified mail to the Permittee and to all financial assurance providers, if applicable. The notice will inform the parties of the determination to forfeit all or a portion of the financial assurance. If NMED's access to the financial

# Terms and Conditions

assurance is threatened due to time constraints, NMED may begin a forfeiture proceeding and provide written notice contemporaneously with that proceeding. The written notice will state the reasons for the forfeiture and the amount to be forfeited.

The amount to be forfeited shall be based on the total cost of performing complete closure in accordance with this Discharge Permit and all applicable laws and regulations. NMED will also advise the Permittee and all financial assurance providers, if applicable, of the conditions under which forfeiture may be avoided. Such conditions may include an agreement that the Permittee, a financial assurance provider, or an NMED-approved third party, will perform complete closure in accordance with this Discharge Permit and all applicable laws and regulations, and the entity has demonstrated it has the financial ability and technical qualifications to do so.

All financial assurance forfeited shall become immediately payable to the trust or as otherwise provided in the NMED-approved instrument. Forfeited funds shall be used to perform complete closure. If the forfeited amount is insufficient, the Permittee shall be liable for the remaining costs. If the amount forfeited is more than necessary, the excess amount shall be refunded to the entity from whom it was collected.

c) Release: The financial assurance instrument shall be released or modified when NMED determines that all activities of complete closure have been performed according to the CP requirements of this Discharge Permit and the Discharge Permit has been terminated.

[Subsection A of 20.6.2.3107]

#### E. GENERAL TERMS AND CONDITIONS

#	Terms and Conditions		
31.	RECORD KEEPING - The Permittee shall maintain a written record of:		
	<ul> <li>Information and data used to complete the application for this Discharge Permit;</li> </ul>		
	<ul> <li>Information, data, and documents demonstrating completion of closure activities;</li> </ul>		
	<ul> <li>Any releases (commonly known as "spills") not authorized under this Discharge Permit and reports submitted pursuant to 20.6.2.1203 NMAC;</li> </ul>		

## **Terms and Conditions** • The operation, maintenance, and repair of all facilities/equipment used to treat, store or dispose of waste; Facility record drawings (plans and specifications) showing the actual construction of the Facility and bear the seal and signature of a licensed New Mexico professional engineer; Copies of logs, inspection reports, and monitoring reports completed and/or submitted to NMED pursuant to this Discharge Permit; The amount of wastes discharged pursuant to this Discharge Permit; Groundwater quality and wastewater quality data collected pursuant to this Discharge Permit; • Copies of construction records (well log) for all sampled groundwater monitoring wells pursuant to this Discharge Permit; The maintenance, repair, replacement or calibration of any monitoring equipment or flow measurement devices required by this Discharge Permit; and Data and information related to field measurements, sampling, and analysis conducted pursuant to this Discharge Permit, including: o the dates, location and times of sampling or field measurements; o the name and job title of the individuals who performed each sample collection or field measurement; o the sample analysis date of each sample o the name and address of the laboratory, and the name of the signatory authority for the laboratory analysis; o the analytical technique or method used to analyze each sample or collect each field measurement; the results of each analysis or field measurement, including raw data; o the results of any split, spiked, duplicate or repeat sample; and o a copy of the laboratory analysis chain-of-custody as well as a description of the quality assurance and quality control procedures used. The Permittee shall maintain the written record at a location accessible to NMED during a Facility inspection for the lifetime of the Discharge Permit. The Permittee shall make the record available to the department upon request. [Subsections A and D of 20.6.2.3107 NMAC] 32. SUBMITTALS — The Permittee shall submit both a paper copy and an electronic copy of all notification and reporting documents required by this Discharge Permit, e.g., monitoring reports. The paper and electronic documents shall be submitted to the NMED Permit Contact identified on the Permit cover page.

#	Terms and Conditions
	[Subsection A of 20.6.2.3107 NMAC]
33.	INSPECTION and ENTRY – The Permittee shall allow NMED to inspect the Facility and its operations that are subject to this Discharge Permit and the WQCC regulations. NMED may upon presentation of proper credentials, enter at reasonable times upon or through any premises in which a water contaminant source is located or in which any maintained records required by this Discharge Permit, the regulations of the federal government, or the WQCC are located.
	The Permittee shall allow NMED to have access to and reproduce for their use any copy of the records, and to perform assessments, sampling or monitoring during an inspection for the purpose of evaluating compliance with this Discharge Permit and the WQCC regulations.  No person shall construe anything in this Discharge Permit as limiting in any way the
	inspection and entry authority of NMED under the WQA, the WQCC Regulations, or any other local, state or federal regulations.
	[Subsection D of 20.6.2.3107 NMAC, NMSA 1978, §§ 74-6-9.B and 74-6-9.E]
34.	DUTY to PROVIDE INFORMATION - The Permittee shall, upon NMED's request, allow for NMED's inspection/duplication of records required by this Discharge Permit and/or furnish to NMED copies of such records.  [Subsection D of 20.6.2.3107 NMAC]
35.	MODIFICATIONS and/or AMENDMENTS – In the event the Permittee proposes a change
33.	to the Facility or the Facility's discharge that would result in a change in the volume discharged; the location of the discharge; or in the amount or character of water contaminants received, treated or discharged by the Facility, the Permittee shall notify NMED prior to implementing such changes. The Permittee shall obtain NMED's approval (which may require modification of this Discharge Permit) prior to implementing such changes.
	[Subsection C of 20.6.2.3107 NMAC, Subsections E and G of 20.6.2.3109 NMAC]
36.	PLANS and SPECIFICATIONS — In the event the Permittee proposes to construct a wastewater system or change a process unit of an existing system such that the quantity or quality of the discharge will change substantially from that authorized by this Discharge Permit, the Permittee shall submit construction plans and specifications of the proposed system or process unit to NMED for approval prior to the commencement of construction.

#	Terms and Conditions		
	In the event the Permittee implements changes to the wastewater system authorized by this Discharge Permit that result in only a minor effect on the character of the discharge, the Permittee shall report such changes (including the submission of record drawings where applicable) as of January 1 and June 30 of each year to NMED.  [Subsections A and C of 20.6.2.1202 NMAC, NMSA 1978, §§ 61-23-1 through 61-23-32]		
37.	CIVIL PENALTIES - Any violation of the requirements and conditions of this Discharge Permit, including any failure to allow NMED staff to enter and inspect records or facilities, or any refusal or failure to provide NMED with records or information, may subject the Permittee to a civil enforcement action. Pursuant to WQA 74-6-10(A) and (B), such action may include a compliance order requiring compliance immediately or in a specified time, assessing a civil penalty, modifying or terminating the Discharge Permit, or any combination of the foregoing; or an action in district court seeking injunctive relief, civil penalties, or both. Pursuant to WQA 74-6-10(C) and 74-6-10.1, civil penalties of up to \$15,000 per day of noncompliance may be assessed for each violation of the WQA 74-6-5, the WQCC Regulations, or this Discharge Permit, and civil penalties of up to \$10,000 per day of noncompliance may be assessed for each violation of any other provision of the WQA, or any regulation, standard, or order adopted pursuant to such other provision. In any action to enforce this Discharge Permit, the Permittee waives any objection to the admissibility as evidence of any data generated pursuant to this Discharge Permit.		
	[20.6.2.1220 NMAC, NMSA 1978, §§ 74-6-10 and 74-6-10.1]		
38.	<ul> <li>CRIMINAL PENALTIES – No person shall:         <ul> <li>Make any false material statement, representation, certification or omission of material fact in an application, record, report, plan or other document file submitted or maintained under the WQA;</li> <li>Falsify, tamper with or render inaccurate any monitoring device, method record maintained under the WQA; or</li> <li>Fail to monitor, sample or report as required by a permit issued pursuant to state or federal law or regulation.</li> </ul> </li> </ul>		
	Any person who knowingly violates or knowingly causes or allows another person to violate the requirements of this condition is guilty of a fourth-degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who		

is convicted of a second or subsequent violation of the requirements of this condition is guilty of a third-degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who knowingly violates the requirements of this

#	Terms and Conditions		
	condition or knowingly causes another person to violate the requirements of this condition and thereby causes a substantial adverse environmental impact is guilty of a third-degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15. Any person who knowingly violates the requirements of this condition and knows at the time of the violation that he is creating a substantial danger of death or serious bodily injury to any other person is guilty of a second degree felony and shall be sentenced in accordance with the provisions of NMSA 1978, § 31-18-15.		
39.	COMPLIANCE with OTHER LAWS - Nothing in this Discharge Permit shall be construed in any way as relieving the Permittee of the obligation to comply with any other applicable federal, state, and/or local laws, regulations, zoning requirements, nuisance ordinances, permits or orders.  [NMSA 1978, § 74-6-5.L]		
40.	RIGHT to APPEAL - The Permittee may file a petition for review before the WQCC on this Discharge Permit. Such petition shall be in writing to the WQCC within thirty days of the receipt of postal notice of this Discharge Permit and shall include a statement of the issues raised and the relief sought. Unless the Permittee files a timely petition for review, the decision of NMED shall be final and not subject to judicial review.  [20.6.2.3112 NMAC, NMSA 1978, § 74-6-5.0]		
41.	<ul> <li>TRANSFER of DISCHARGE PERMIT - Prior to the transfer of any ownership, control, or possession of this Facility or any portion thereof, the Permittee shall:         <ul> <li>Notify the proposed transferee in writing of the existence of this Discharge Permit;</li> <li>Include a copy of this Discharge Permit with the notice; and</li> <li>Deliver or send by certified mail to NMED a copy of the notification and proof that the proposed transferee has received such notification.</li> </ul> </li> <li>The Permittee shall continue to be responsible for any discharge from the Facility, until both ownership and possession of the Facility have been transferred to the transferee.</li> <li>[20.6.2.3111 NMAC]</li> </ul>		
42.	PERMIT FEES – The Permittee shall be aware that the payment of permit fees is due at the time of Discharge Permit approval. The Permittee may pay the permit fees in a single payment or they may pay the fee in equal installments on a yearly basis over the term of the Discharge Permit. The Permittee shall remit single payments to NMED no later than		

#### # Terms and Conditions

30 days after the Discharge Permit issuance date. The Permittee shall remit initial installment payments to NMED no later than 30 days after the Discharge Permit issuance date; with subsequent installment payments remitted to NMED no later than the anniversary of the Discharge Permit issuance date.

Permit fees are associated with <u>issuance</u> of this Discharge Permit. No person shall construe anything in this Discharge Permit as relieving the Permittee of the obligation to pay all permit fees assessed by NMED. A Permittee that ceases discharging or does not commence discharging from the Facility during the term of the Discharge Permit shall pay all permit fees assessed by NMED. NMED shall suspend or terminate an approved Discharge Permit if the Permittee fails to remit an installment payment by its due date.

[Subsection F of 20.6.2.3114 NMAC, NMSA 1978, § 74-6-5.K]



# New Mexico Environment Department Ground Water Quality Bureau Discharge Permit Summary

#### **Facility Information**

Facility Name San Juan Generating Station Solid Waste Disposal Pit

**Discharge Permit Number** DP-306

**Legally Responsible Party** Sky Northup, Director, Plant Manager

Public Service Company of New Mexico

P.O. Box 227

Waterflow, NM 87421

(505) 598-7570

#### **Treatment, Disposal and Site Information**

**Primary Waste Type** 

**Facility Type** 

Plant Generated Residual Wastes

Energy Utility – Power Plant

**Discharge Locations** 

Туре	Designation	Description & Comments
Impoundment	Solid Waste Pit	50,000 cubic yard capacity, synthetically lined

**Depth-to-Ground Water** 10 - 40 feet

Total Dissolved Solids (TDS) 9,000 - 25,000 mg/L

#### **Permit Information**

Original Permit Issued
Permit Renewal and Modification
Permit Renewal
Permit Renewal
Permit Renewal
Permit Renewal
July 19, 2002
Permit Renewal
June 5, 2013

Current Action Renewal

Application Received January 17, 2018
Public Notice Published [not yet published]
Permit Issued (Issuance Date) [issuance date]

Permitted Discharge Volume 2,290 cubic yards per year

#### **NMED Contact Information**



# New Mexico Environment Department Ground Water Quality Bureau Discharge Permit Summary

Mailing Address Ground Water Quality Bureau

P.O. Box 5469

Santa Fe, New Mexico 87502-5469

**GWQB Telephone Number** (505) 827-2900

NMED Lead Staff Andrew Romero Lead Staff Telephone Number (505) 660-8624

**Lead Staff Email** andrewc.romero@state.nm.us